METEOROLOGICAL OFFICE

NEWSLETTER

FOR

CLIMATOLOGICAL OBSERVERS

IN

ENGLAND AND WALES

NO 1

OCTOBER 1978

Produced by:

Met O 1

Observational Requirements and Practices Branch

Eastern Road

Bracknell

Berkshire RG12 2UR

Introductions to the Newsletter

1. By D R Grant, Assistant Director, Observational Requirements and Practices Branch, Met O 1.

The origin and development of the UK network of climatological stations are described in the enclosed article by R J Ogden, until recently the head of the Climatological Branch of the Meteorological Office. About 90% of the network stations are still maintained by non-professional observers.

The role of the Meteorological Office as explained in Mr Ogden's article is primarily organisational and, of course, the periodic inspections made by members of its staff ensure uniformity of standards for observing. The Office also has the responsibility for answering enquiries for information on climatology which are received from a wide range of interests and your observations are often used to contribute some of the data.

During visits inspectors have had complaints from some observers that their contacts with the Office are too brief and infrequent. Shortage of staff makes it impossible to visit stations more frequently but it has been decided to issue a newsletter twice a year to keep observers in touch with developments in the network, to help them by pointing out the more common errors in observational practices, to advise them on how their observations are examined and used and occasionally to circulate short articles by observers on unusual weather in their area. This is the first letter in the series, and we hope you will find it useful and interesting. Your comments and suggestions for future issues would be appreciated.

D R Grant

2. By C R Flood, Assistant Director, Climatological Services Branch, Met O 3

I have recently taken over from Mr Ogden as Assistant Director of Climatological Services, having previously been one of the forecasters in the Central Forecast Office at Bracknell. The climatological network needs to be denser than that needed for day to day forecasting purposes (where speed of reporting is the main requirement), so we are always keen to add new stations where possible. As you know, we are very much dependent on observers outside the Meteorological Office - both individuals and authorities like Local Councils and Water Authorities.

I have been very impressed by the general enthusiasm of observers, as illustrated by informal visit to the Penmaen station during my holiday on the Gower Peninsula. Besides running a fine station, John Powell appears daily on local radio to present his own forecast, and answers numerous weather enquiries. I was also confronted with what appeared to be a highly non-standard wind vane, which in reality was for measuring the pollen count!

One point I would like to emphasise is that the observations are not merely archived but are used to benefit the community at large. Based on a set of observations, advice is given for a wide variety of applications from building construction to legal matters. One of the more unusual requests recently was to supply wind and rain data for an investigation by Sir Fred Hoyle and Professor Chandra Wickramasinghe into the origins of the influenza epidemic last winter. Reports have since appeared in the national press under headlines like "Viruses from Outer Space?".

I hope that the co-operation between observers and the Meteorological Office will continue to be fruitful.

C R Flood

Editorial

Those observers who have attended a course at Shinfield Park will already know many of us at Bracknell and will also know that we usually start those courses with introductions all round. In this, our first Newsletter, it would be appropriate to open similarly. However, I cannot, of course, ask you to introduce yourselves in the same way here but I can invite you to write in with contributions or letters so you will become known that way. Also, this will make the point that this Newsletter is really a joint venture - yours as well as ours.

For ourselves, many of our names if not our faces will be familiar. In the Met O 1 (Observational Requirements and Practices) Branch team you will know Desiree Allen and George Swift who work with me, while in the Met O 3 (Climatological Services) Branch team there are Fred Landon and John Humphreys who work with John George. Together we are responsible for the day-to-day running of the climatological station and the quality control of the observations. It is very important to all users of climatological data that the network is running smoothly and we like to think that we are at least close to that objective.

We hope to produce this Newsletter twice a year with the idea of keeping more closely in touch with you and possibly providing an open forum for you to bring up matters which might not otherwise be aired. Edinburgh have had their Newsletter for Scottish observers for some time so this Newsletter will be going only to those of you in England and Wales.

Please address any letters or contributions for the Newsletter to me.

David Smith

News of Stations

Every month we receive letters from observers who wish to begin recording the weather in co-operation with the Meteorological Office. From these initial approaches we start the sometimes quite lengthy process of recruiting a new station and one such station which we are pleased to welcome to the network this year is Westergate, near Chichester, Sussex, where Mr P Barton, Head of Geography, is running the climatological station at Westergate School. We hope that the period of co-operation with Westergate is a long and happy one. More potential stations are in the offing and details will be given in our next newsletter.

On the other side of the coin, there are stations which through one reason or another have had to close or discontinue their period of co-operation with us. We are always sorry to lose the continuity of record of any station, especially those with a long history of recording. Stations which have closed within the last year include Burlingham, Huddersfield (Ravensknowle) Ellbridge and Newport (Cleppa Park).

Many observers may not be aware that a presentation is made to observers who have given particularly long and satisfactory service. This presentation usually takes the form of a suitably inscribed barograph.

One such observer to whom we offer our congratulations this year is Sir Adrian Beecham, Bart., who began observing at Clapton House, Stratford-on-Avon in 1933. Then in 1939 he set up his own climatological station at Shipston-on-Stour which he maintains to this day. He was presented with a barograph on 16 June 1978 by Mr C R Flood, Assistant Director, Climatological Services, at Sir Adrian's home.

G W Swift

Admin Notes for Authorities & Observers

Met O 1c(3) is responsible for ensuring that all stations receive sufficient supplies of forms and stationery in order to maintain continuity of records. We do therefore appreciate Authorities or observers informing us when their stocks of such items are running low. Occasionally we receive requests when the observer is down to his last form and expects a further supply by return of post! Unfortunately a minimum of four weeks and sometimes as long as eight weeks is required before supplies from our forms store in London reach the co-operating station. We do keep a small stock available for emergencies, but please do not run your stocks too low before sending in your orders for forms and stationery.

Some stations use up their annual supply of forms before the October issue arrives. If you find this supply is insufficient to last the year please let us know and we can then increase the annual issue.

The processing of orders for instruments can be speeded up if orders are sent direct to us at Met O 1c(3) Eastern Road, Bracknell. Many requests reach us days late having been sent to other Branches who are unable to identify the originator or addressee.

G W Swift

Visits by Met Office Staff

There have been, and still are perhaps, a few puzzled frowns on the brows of our observers. Many are wondering, even concerned, why there is to be a visit from a member of the Met Office two or even three years running, when in the past the interval between such visits has been at least 2 years and sometimes 5 years.

At the beginning of 1977 it was decided that all our co-operating stations would be visited in one year. This was quite a massive undertaking when it is realised that in England and Wales alone there are over 300 stations.

As a result of this experience, it was found that more frequent visits by Met Office Staff would be beneficial for the observers as well as the Met Office. Some observers thought that except for seeing a "Met Man" once in 5 years, no one really cared about them. The only contact was a query form from Met O 3a if something was wrong! We do not want any of our observers to feel this way and in future it is hoped that the frequency of visits will be every 2 years. If there is to be a change of site of the enclosure or the resiting of an instrument is necessary, a special visit may be needed. Members of our visiting staff are there to help or advise and answer any questions that may arise. These visits are in no way fault finding exercises but occasions of mutual help and understanding of the nations main topic of conversation - the weather.

In between these visits, any of our observers are welcome to write to us at Met O 1c(3), Eastern Road, Bracknell, with a particular question on any aspect of observing and we will do our best to help. There is no need to incur extra postage costs either; a note enclosed with the monthly return will find its way to us and you will receive a reply.

Désirée Allen

Snow in August?

To discover and correct the errors that are bound to occur in climatological returns we (the Climatological Services Branch - Met O 3) have developed computer methods to examine all data received by the Meteorological Office. Each value that fails one of these checks results in that observation being queried until one of the scrutiny staff has taken some action. The computer only queries observations, it does not resolve any of the queried values.

These checks have now been in use more than ten years and we can identify the most common mistakes on the returns.

1. An easy winner in the error league is maximum temperature being colder or the minimum temperature being warmer than either of the dry bulb readings at 0900 on the previous day or 0900 on the day. It is always worthwhile checking maximum and minimum temperature against these two dry bulb readings when the observation is taken.

2. Another frequent error is nil rainfall measured although precipitation is recorded in the present weather code.

3. Present weather inconsistent with visibility ie fog reported (ww = 41-49) but visibility recorded as code figure 4 or more. Conversely visibility reported as code figure 3 or less but ww code does not agree.

4. "Snow in August" is the check of temperature against present weather. Often snow is reported rather than a form of hail. Snow does not usually fall when dry bulb temperature exceeds 5° centigrade.

Care in resetting the thermometer is essential. The reset maximum and minimum thermometer should agree within 0.2°C of the dry bulb. After resetting the maximum thermometer keep the bulb end lower than the other end and the minimum thermometer bulb higher than the other end whilst replacing in the retaining clips

If the occasion does arise when a value is queried by one of the scrutineers at Bracknell, check the value queried against your observation book. If you are certain the original reading is correct tell us so, otherwise consider the value suggested as a likely reading and then give us your opinion.

Make full use of the observation book. Scraps of paper or cigarette packets can create problems. One of our observers, a vicar, sent to us the result of morning church collection and to the Bishop the rainfall reading. He was very relieved when we queried his rainfall reading. The mix-up then became obvious. He is now a confirmed (!) user of the observation book.

Finally we welcome contact with all observers and hope you will always feel free to write or telephone us whenever you have any problems of observing or completing the climatological returns.

F A Landon

The Great Blizzard of 1978

Friday evening on February 17 at Chawleigh Weather Station was fine and quiet with little sign of what was to come, yet there seemed something strange about the weather, the ESE wind was freshening by 2100 and upper cloud coming up from the SW - this combined with a forecast of snow and perhaps a funny smell in the air made me rather suspicious. Saturday morning dawned dull with the ESE wind now gusting to 36 kt and the 18 cm of dry lying snow was on the move, by 1200 the wind was exceeding 40 kt and driving the lying snow in a wild fury across the open country, snow began falling and by 1500 was continuous and moderate - by now a full blizzard had developed and was to continue for the next 35 hours - at times conditions were so bad that a 'whiteout' developed and it was impossible to tell if snow was falling or not. The wind reaching nearly 50 kt was howling and driving the snow in great sheets extending perhaps 100 ft or more in the air.

Doing the 2100 observation at Chawleigh on Saturday 18th was very difficult as it was next to impossible to see. However the 40 metre journey to the enclosure was made successfully. The 0900 observation on Sunday morning was done in impossible conditions - great drifts of snow 15 ft high or more had to be climbed with visibility almost non-existent. The temperature was -20C and wind near 50 kt - indeed conditions were almost beyond the limit of human endurance and the observation was a nightmare - as was the 2100 observation the same day. It was not until Monday morning that one was able to see the full extent of this incredible blizzard.

M Sampson

Chawleigh Observer

Weather in the United Kingdom

January-June 1978

January was generally unsettled. A whirlwind occurred in Newmarket on the 3rd, northerly gales caused widespread damage along the east coast of England on the 11th/12th and northern Scotland experienced a severe blizzard on the 28th and 29th. In spite of the changeable weather, some places had a sunny month: this was the sunniest January at Torbay and Teignmouth since 1952 and at Glasgow's Springburn Park since 1959. Temperatures were below average in February and the middle two weeks were very cold, with temperatures in parts of Lincolnshire and East Anglia not rising above 0°C during the 5 days from the 9th to the 13th. There were heavy falls of snow in northern areas and an exceptionally severe blizzard affected south-west England and South Wales on the 18th/19th. The first half of March was mild, but it became colder around mid-month, and sleet and snow fell in most districts on the 15th/16th. Some parts had more than twice their normal rainfall for the month and it was the wettest March on record at a number of places in Scotland. April was cool, and monthly sunshine totals were also mostly below average. Snow fell in many areas during the second week and mostly in the north towards the end of the month. Less than half the normal amount of rain fell in western Scotland and in most of Northern Ireland and north-west England. May was generally cool and wet during the first half and warm and dry later. Rainfall was well below average in many western and northern districts and it was the driest May in the Glasgow area since records began in 1868. The hot weather at the end of May continued over the first few days of June, but it then became cooler and ground frost occurred in central southern England on the night of the 15th/16th. There was a warm spell during the third week, however. Rainfall was again below average in some northern areas, but thunderstorms caused considerable variations in totals in parts of England.